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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/517,519 | 12/13/2004 | Anton Stich | 21415 | 7072 |

7590 03/06/2007
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| EXAMINER |
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WEBB, TIFFANY LOUISE

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| ART UNIT | PAPER NUMBER |
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3616

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/06/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/517,519

Applicant(s)

STICH, ANTON

Examiner

Tiffany L. Webb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claims 1-4 have been cancelled.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 80.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stack of piezo elements forming a longitudinal section of the steering column across the cross-section must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 5 and 6 are objected to because of the following informalities: the means for emitting suppressing vibrations is referred to as both "vibration emitting means" and "suppression vibration emitting means." The examiner suggests changing to be consistent. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "the engine" in line 2, and "the body" in line 3. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 7 recites the limitation "the surface" in line 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 8 recites the limitation "the cross-section" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartel et al. (US 2002/0130533). Regarding claim 5, Hartel et al. discloses a system for dampening vibrations transmitted from a surface over which a vehicle traverses (see abstract), and the engine of said vehicle, said vehicle having a steering column (6) being supported on a retainer (5) connected to the body of said vehicle, operatively connected to a steering gear and having a steering wheel, comprising: means for emitting suppressing vibrations (8), mounted on said steering column between said retainer and said steering wheel (see paragraph [0020]), and operatively connectable to a control means (10); and means for sensing vibrations (see paragraph [0021]), mounted on said steering column between said vibration emitting means and said steering wheel, and operatively connectable to said control means. Regarding claim 6, Hartel et al. discloses the suppression vibration emitting means being a piezoceramic actuator (paragraph [0019]). Regarding claim 7, Hartel et al. discloses that actuator includes at least two piezoceramic elements spaced about the periphery of the steering column and being firmly secured to the surface thereof (see paragraph [0020]). Regarding claim 8, Hartel et al. discloses the actuator having a stack of piezo elements forming a longitudinal section of said steering column across the cross-section thereof (see paragraphs [0019]-[0021]). Regarding claim 9, Hartel et al. discloses the control

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means operatively connected to the sensing means and said suppression vibration emitting means (see paragraph [0019] and Figure 1). Regarding claim 10, Hartel et al. discloses the control means is operable to apply a signal to the actuator causing said actuator to vibrate at a frequency equal and opposite in phase to a sensed frequency (see paragraph [0021]).


11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are all steering wheel damper configurations: Zinn (US 2,930,247), Butts (US 3,538,783), Heinrichs et al. (US 5,449,199), Card (US 6,547,043), Ashtiani et al. (US 2002/0008362), Worrell et al. (US 2002/0092699), Ahmad et al. (US 2003/0120468), and Loh et al. (US 2004/0084887).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tiffany L. Webb whose telephone number is 571-272-2797. The examiner can normally be reached on 8-4:30 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tiffany L Webb
Examiner
Art Unit 3616

tlw

 3/5/07
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